

FINTECH SPR 2016

ASSIGNMENT 1 / Due Date: April 5th

Name:

ID:

1. Write a single script in Sublime that includes the following functions:

- argv
- print
- open/ read/ close
- def
- raw_input
- comment (#)

In the very first line of Python codes, use:

your name, id

2. Run the MNIST training that we did in class, but change the following:

- Number of epochs = 30, 50, 100
- Learning rate (eta) = 0.1, 2

Print out the results (xxxx/ 10000) for the last 20 epochs.

3. In 200 words, write down the basic concepts of:

- The basic structure of an artificial neural network
- Gradient Descent
- Cost landscape

4. In 400 words, write down what kind of data you can use for neural network and what would you like to model and predict? Describe the basic data structure and basic output structure.